

Title (en)  
HYDROCARBON CONVERSION

Title (de)  
UMWANDLUNG VON KOHLENWASSERSTOFFEN

Title (fr)  
CONVERSION D'HYDROCARBURES

Publication  
**EP 0623101 B1 19980429 (EN)**

Application  
**EP 93901343 A 19921216**

Priority  
• US 9210777 W 19921216  
• US 81524491 A 19911231

Abstract (en)  
[origin: WO9313039A1] An olefins process is described which combines cracking of a hydrocarbon feedstock with the coupling of methane using an oxygen-affording gas such that the heat evolved in the exothermic methane coupling reaction is effectively transferred to the endothermic cracking process in a manner which does not allow the non-hydrocarbon products in the effluent of the methane coupling reaction to mix with the effluent of the cracking process. By combining the cryogenic requirements of the two processes, the refrigeration used in air liquifaction to separate oxygen for the methane coupling process can provide refrigerant nitrogen to liquify one or more of methane, ethylene and propylene which can be used in the cryogenic separation of the C2+ hydrocarbon products in the cracking process effluent.

IPC 1-7  
**C07C 2/84**; **C07C 5/48**; **B01J 23/10**; **B01J 23/14**

IPC 8 full level  
**B01J 8/00** (2006.01); **B01J 19/24** (2006.01); **B01J 23/10** (2006.01); **B01J 23/14** (2006.01); **C07B 61/00** (2006.01); **C07C 2/84** (2006.01); **C07C 4/04** (2006.01); **C07C 5/48** (2006.01); **C07C 11/02** (2006.01); **C07C 11/04** (2006.01); **C07C 11/06** (2006.01); **C10G 9/00** (2006.01); **C10G 9/36** (2006.01); **C10G 50/00** (2006.01); **C10G 57/00** (2006.01)

CPC (source: EP US)  
**B01J 8/009** (2013.01 - EP US); **B01J 19/2475** (2013.01 - EP US); **B01J 23/10** (2013.01 - EP US); **B01J 23/14** (2013.01 - EP US); **C07C 2/84** (2013.01 - EP US); **C07C 4/04** (2013.01 - EP US); **C07C 5/327** (2013.01 - EP US); **C07C 5/48** (2013.01 - EP US); **C10G 57/00** (2013.01 - EP US); **B01J 2219/00063** (2013.01 - EP US); **B01J 2219/00117** (2013.01 - EP US); **B01J 2219/00126** (2013.01 - EP US); **B01J 2219/00155** (2013.01 - EP US); **C07C 2521/02** (2013.01 - EP US); **C07C 2521/06** (2013.01 - EP US); **C07C 2523/02** (2013.01 - EP US); **C07C 2523/08** (2013.01 - EP US); **C07C 2523/10** (2013.01 - EP US); **C07C 2523/14** (2013.01 - EP US); **Y10S 585/91** (2013.01 - EP US); **Y10S 585/911** (2013.01 - EP US); **Y10S 585/943** (2013.01 - EP US)

C-Set (source: EP)  
1. **C07C 5/327** + **C07C 11/04**  
2. **C07C 5/327** + **C07C 11/06**

Cited by  
DE102013106837A1; EP2818238A1

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AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)  
**WO 9313039 A1 19930708**; AT E144970 T1 19961115; AT E165593 T1 19980515; DE 69215080 D1 19961212; DE 69215080 T2 19970306; DE 69225334 D1 19980604; DE 69225334 T2 19981217; EP 0575579 A1 19931229; EP 0575579 B1 19961106; EP 0623101 A1 19941109; EP 0623101 B1 19980429; ES 2093402 T3 19961216; JP H06506482 A 19940721; JP H07502733 A 19950323; US 5254781 A 19931019; WO 9313037 A1 19930708

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**US 9211038 W 19921221**; AT 93901141 T 19921221; AT 93901343 T 19921216; DE 69215080 T 19921221; DE 69225334 T 19921216; EP 93901141 A 19921221; EP 93901343 A 19921216; ES 93901141 T 19921221; JP 51171593 A 19921216; JP 51180793 A 19921221; US 81524491 A 19911231; US 9210777 W 19921216